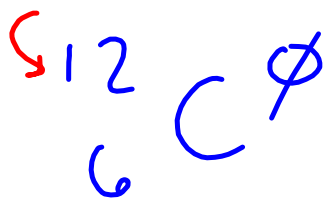


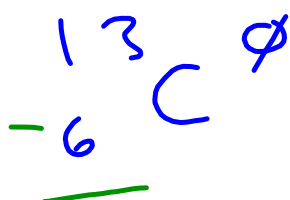
Isotope  $\rightarrow$  element with different  
 $\neq n^0$

$$\text{mass \#} = p^+ + n^0$$

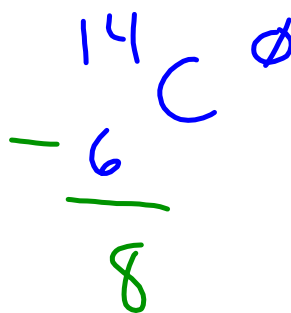
mass number



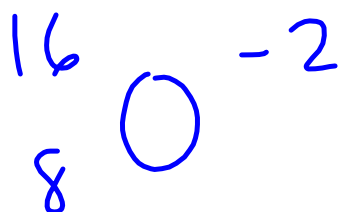
↑  
atomic  
number



↑  
number  
of  $n^0$



Ions  $\rightarrow$  atoms that have a net charge



$$p^{+} = 8$$

$$n^{0} = 8$$

$$e^{-} = 10$$



$$p^{+} = 8$$

$$n^{0} = 7$$

$$e^{-} = 10$$



$$p^{+} = 19$$

$$n^{0} = 20$$

$$e^{-} = 18$$